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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.       | CONFIRMATION NO.       |
|---|-------------|----------------------|---------------------------|------------------------|
| 10/577,766  | 01/03/2007  | Jun Kitakado         | 278542003500              | 6931                   |
| 25225 7590 12/22/2009<br>MORRISON & FOERSTER LLP<br>12531 HIGH BLUFF DRIVE<br>SUITE 100<br>SAN DIEGO, CA 92130-2040 |             |                      | EXAMINER<br>SARWAR, BABAR |                        |
|   |             |                      | ART UNIT<br>2617          | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>12/22/2009   | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/577,766             | KITAKADO, JUN       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | BABAR SARWAR           | 2617                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 10-17, 22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-17, 22 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **10/06/2009** has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed **10/06/2009** have been fully considered but they are not persuasive.
3. **Claims 10-12, 16, 22-23** have been amended.
4. **Claims 1-9** were previously cancelled.
5. **Claims 18-21** are currently cancelled.
6. **Claims 10-17, 22-23** are currently pending.

The applicant argued about features wherein “a detector which detects information on one of an uplink and downlink set to be prioritized, from **request** signals received from the terminal apparatus”; and “the uplink or downlink set in the information detected by the detector as being prioritized is determined by the terminal apparatus” read over Awad in view of Tied as follows;

Awad discloses an adaptive modulation and coding method comprises selecting one of a plurality of different available modulation and coding levels to apply to a signal

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transmitted from a transmitter to a receiver. Awad further discloses that there is provided an operating program which, when run on a processor in a user equipment of a wireless communication system, causes the user equipment to carry out certain steps of the AMCS method. One step is to select one of a plurality of different available modulation and coding levels to be applied by a base station of the system to a downlink signal transmitted from the base station to the user equipment. The user equipment comprises a selecting unit which selects the modulation and coding levels i.e., downlink set in the information is determined by the terminal apparatus. Awad also discloses that there is provided an operating program which, when run on a processor in a base station of a wireless communication system, causes the base station to carry out certain steps. One step is receiving from a user equipment of the system a report of a downlink signal transmission quality produced by the user equipment. Another step is selecting one of a plurality of different available modulation and coding levels to be applied by the base station to a downlink signal transmitted from the base station to the user equipment i.e., the AMCS method could be implemented in both the base station and the user equipment as discussed in **Para 0047, 0049**. Thus the applied art shows the abovementioned claimed limitations.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 10-17, 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable Awad et al. (US 2004/0022177 A1) in view of Tiedemann et al. (US 2007/0206623 A1), hereinafter referenced as Awad and Tied.**

Consider **claims 10, 16, and 22-23**, Awad discloses method for determining a transmission rate (**Abstract, where Awad discloses an adaptive modulation and coding method**), comprising: communicating with a predetermined terminal apparatus at a variable transmission rate (**Fig.1, where Awad discloses User Equipments in communication with the base station**); performing a processing of varying a transmission rate of an uplink or downlink according to a channel quality of the terminal apparatus (**Para 0047-0048, Fig. 4, where Awad discloses MCS levels in accordance with the variation of the channel conditions**); detecting information on one of the uplink and downlink set to be prioritized, from request signals received from the terminal apparatus; and referring to the information thus detected (**Para 0073, Fig. 8, where User equipment measures downlink channel quality, therefore detecting information on one of the uplink and downlink set to be prioritized**); the uplink or downlink set in the information detected by the detector as being prioritized is determined by the terminal apparatus (**Para 0047-0049, where Awad discloses the user equipment comprises a selecting unit which selects the modulation and coding levels, therefore the uplink or downlink set in the information is determined by the terminal apparatus**). Awad does not explicitly disclose that stopping the processing of varying the transmission rate and maintaining the transmission rate if the one of the uplink and downlink set to be prioritized is different

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from the uplink or downlink subject to variation of the transmission rate, wherein the transmission rate varying stops data communication in the uplink and downlink in order to execute the processing of varying the transmission rate. Tied discloses that stopping the processing of varying the transmission rate (**Para 0144, Fig. 8, where Tied discloses implementing a transmit rate hold, therefore stopping the processing of varying the transmission rate**) and maintaining the transmission rate if the one of the uplink and downlink set to be prioritized is different from the uplink or downlink subject to variation of the transmission rate (**Para 0144, Fig. 8, elements 850, 860, where Tied discloses maintaining the transmission rate**), wherein the transmission rate varying stops data communication in the uplink and downlink in order to execute the processing of varying the transmission rate (**Para 0144, 0146, Fig. 8, where Tied discloses if rate control, and stoppage of the modulation process are desired, therefore stopping data communication in the uplink and downlink in order to execute the processing of varying the transmission rate**).

Therefore it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify Awad with the teachings of Tied so as to implement the ability to adjust transmission rates as necessary as discussed in **Para 0012**.

Consider **claims 11, 12**, Awad discloses a base station, comprising: a communication unit (**Para 0048, Fig. 8, where Awad discloses a selection unit performing modulation and coding levels**) which communicates with a predetermined terminal apparatus at a variable transmission rate apparatus (**Para 0047,**

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**Fig. 8, where Awad discloses a selection unit performing modulation and coding levels);** a transmission rate varying unit which measures a quality of a channel for the terminal apparatus and performs a processing of varying a transmission rate of an uplink according to the quality **(Para 0048, where Awad discloses MCS levels in accordance with the variation of the channel conditions);** a detector which detects information on whether the downlink is set to be prioritized, from signals received from the terminal apparatus **(Para 0073, Fig. 8, where User equipment measures downlink channel quality, therefore detecting information on whether the downlink is set to be prioritized);** wherein prioritization of the downlink as set in the information detected by the detector is determined by the terminal apparatus **(Para 0047-0049, where Awad discloses the user equipment comprises a selecting unit which selects the modulation and coding levels, therefore the uplink or downlink set in the information is determined by the terminal apparatus).** Awad does not explicitly disclose that the processing involving the stoppage of data communication in an uplink and downlink; and a communication control unit which stops the processing of varying the transmission rate in the uplink and maintains the transmission rate of the uplink if the downlink priority is set to be prioritized. Tied discloses that the processing involving the stoppage of data communication in an uplink and downlink **(Para 0144, 0146, Fig. 8, where Tied discloses if rate control is desired, and stoppage of the modulation process, therefore stoppage of data communication in an uplink and downlink);** and a communication control unit which stops the processing of varying the transmission rate in the uplink and maintains the transmission rate of the uplink if the

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downlink priority is set to be prioritized (**Para 0144, Fig. 8, elements 850, 860, where Tied discloses maintaining the transmission rate**).

Therefore it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify Awad with the teachings of Tied so as to implement the ability to adjust transmission rates as necessary as discussed in **Para 0012**.

Consider **claim 13**, the combination teaches everything claimed as implemented above (see claims 10). In addition, Awad discloses that a signal monitoring unit which monitors a type or amount of signals transmitted from and received by said communication unit (**Para 0048, where Awad discloses the report receiving unit receiving signal transmission quality from the User equipment**), wherein said communication control unit does not stop the varying processing in said transmission rate varying unit, according to the type or amount of signals of a line which is required to be prioritized by the information priority detected by the detector (**Para 0048, where Awad discloses a selection unit performing modulation and coding levels based upon comparison between transmission quality and threshold values**).

**Claim 14**, as analyzed with respect to limitations discussed in claim 13.

**Claim 15**, as analyzed with respect to limitations discussed in claim 13.

Consider **claim 17**, the combination teaches everything claimed as implemented above (see claims 16). In addition, Awad discloses that wherein if the downlink is determined to be prioritized, said communication control unit disregards an instruction, issued from the base station apparatus, about a change in an uplink transmission rate



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and if the uplink is determined to be prioritized, it does not request the base station apparatus to vary the transmission rate, regardless of a channel quality of the downlink **(Para 0047-0048, Figs. 4, 8, where Awad discloses MCS levels and threshold values and selection units performing comparison between transmission quality and threshold values).**

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BABAR SARWAR whose telephone number is (571)270-5584. The examiner can normally be reached on MONDAY TO FRIDAY 09:00 A.M -05:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NICK CORSARO can be reached on (571)272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BABAR SARWAR/  
Examiner, Art Unit 2617

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